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- (71) Applicants (for all designated States except US): NONO INC. [CA/CA]; c/o Dr. Michael Tymianski, Division of Neurosurgery, Toronto Western Hospital, Suite 4W-431, 399 Bathurst Street, Toronto, Ontario M5T 2S8 (CA). ARBOR VITA CORPORATION [US/US]; 772 Lucerne Drive, Sunnyvale, CA 94085 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): TYMIANSKI, Michael [CA/CA]; 175 Dawlish Avenue, Toronto, Ontario M4N 1H6 (CA). GARMAN, Jonathan, David [US/US]; 5084 McCoy Avenue, San Jose, CA 95130 (US). BEL-MARES, Michael P. [US/US]; 4628 Thimbleberry Lane, San Jose, CA 95129 (US).

- (74) Agent: DEETH WILLIAMS WALL LLP; 150 York Street, Unit 400, Toronto, Ontario M5H 3S5 (CA).
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(54) Title: POLYPEPTIDES FOR MODULATING BINDING OF TRP CHANNEL PROTEINS AND TRP-ASSOCIATED PROTEINS.

(57) Abstract: This invention relates to inhibitors and modulators of the binding between a transcient receptor potential (TRP) channel protein and a TRP-associated binding protein. In particular inhibitors and modulators of the binding between the TRPM7 channel protein and PDZ-domain containing TRP-associated proteins. These modulators and inhibitors are used to control Ca2+transport through TRPM7 channel proteins and reduce damage to mammalian cells, including brain and spinal cord cells, after ischemia or traumatic injury.

